

5/46

P205.633-011

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>24254</b>
<b>Description:</b> Step Weldment Ass'y	<b>Part Number:</b>	<b>D2563</b>
<b>Drawing:</b> D2563 Rev. B	<b>Qty:</b>	<b>10</b>

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller <i>Dwg not required</i>	RF	05.09.14	10
2	WA	Cut D2244 to 89.70" at 34° as per Dwg D2563 Batch: <i>B20457</i>	RF	05.11.28	10
3	WA	Deburr ends	RF	05.11.28	10
4	<del>QC5</del> WA	Inspect for foreign object per QSI 024	RF	05.11.28	10
5	WA	<b>Pick:</b> NA <i>Aluminum Rod m15684 + m18838</i> <b>Qty</b> <b>Part No.</b> <b>Description</b> <b>Batch</b> 2 D2673-34 End Cap <i>B23231</i> 2 D2561 Lug Plate <i>B23470 / 11ms B23405 / 11ms</i> 2 D2564 Mounting Angle <i>B23452 / 11ms B23475 / 11ms</i>	RF	05.11.28	10
6	WA	Weld as per Dwg D2563 using DT 8343 <i>two end caps only / Lug / Mounting Angle</i>	RF	05.11.29	10
7A	WA	Grind	RF	05.11.30	10
8A	QC9 & 5	Inspect Welding and work to Step 7	RF	05.12.05	10
9	FP	Powder Coat White (Ref. 4.3.5.1) per Dart QSI 005 4.3	DL	06.02.04	10
10	QC3	Inspect Powder Coat	RF	06.02.04	10
11	FP	Wing Walk as per Dwg D2563 and QSI 005 4.4	Q.M	06.02.04	10
12	QC3	Inspect Wing Walk	CL	06.10.20	10
13	FP	To KP for packing	CL	06.10.20	10

Rev	Date	Change	Revised By	Approved
A	97.01.14	New Issue		
B	98.05.21	Updated end plate, added steps 8-10	KB	
C	99.02.10	Added Drawing Rev	DM	
D	99.05.06	Moved Insp. Level 9, Re-format	DM	
E	00.05.08	Removed P/O for powder coating	EC	
F	00.07.20	Added inspection for QSI 024	EC	
G	02.07.31	Re-format Location	RF	RF


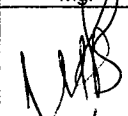
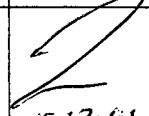
RELEASED  
02/08/02 RF

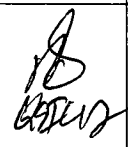
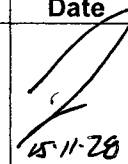

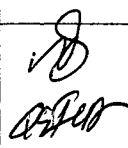
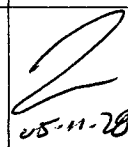
8b	FP	Chemical conversion coat AS per QSI 005 4.1	RF	05.12.08	10
8c	WA	Weld aft end cap AS per Dwg 2563	RF	05.12.08	10
8d	QC9	Inspect weld.	AD	05.12.10	10
8e	FP	touch up end cap with Alodine AS per QSI 005 4.1			

05.12.01

PTO

PTO

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
05-12-01	8	Permanent change as shown 				 05/12/01	 05-12-01

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05-11-28	5	D2561 <del>found</del> B23405 found with a deep mark at hole location.		Scrap destroy D2561 <del>part</del> .	 05-11-28	 05-11-28		 05-11-28

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA:  Date: 06/02/07

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Nov 08, 2005  
11:12 am

Work Order No : 0024254  
Project Name : \*D205-633-011  
Project For : WK546  
Work Order Type : Main  
Main WO Number :  
House Part Number : \*D205-633-011  
Description : Heli-Access-Step  
Manufactured : Yes  
Amount Req'd : 10  
Amount Done : 0  
Start Date : 09-13-05  
Est Finish Date : 11-17-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	2.25	100.00		
Production Cost :	0.00	36.16	100.00	0.00	36.16
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	36.16	100.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	36.16			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	( -36.16)

*WMS 01/3*  
*W*  
*11-01*

Date: Sunday, 11/6/2005 2:02:31 PM  
 User: Linda Lacelle

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : 205 STEP(STANDARD HEIGHT)
<b>Job Number</b> : 24254	
<b>Estimate Number</b> : 10180	
<b>P.O. Number</b> :	<b>Part Number</b> : D205633011
<b>This Issue</b> : 11/6/2005 <b>S.O. No.</b> :	<b>Drawing Number</b> : N/A
<b>Prsht Rev.</b> : NC	<b>Project Number</b> :
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : N/A
<b>Previous Run</b> : 24253	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 11/30/2005 <b>Qty:</b> 10 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> :	
<b>Comment</b> : Est Rev:F 02.07.11 Reformat; Removed D3010 RF	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	24254A	STEP WELDMENT
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**Comment:** Sub-Component STEP WELDMENT

2.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile &amp; type labels per PPP205-633-011 CHG001

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Pick Packing Kit

4.0	D2021101	Eyebolt
-----	----------	---------

5.0	D2022101	Spacer
-----	----------	--------

6.0	D2022103	Spacer
-----	----------	--------

7.0	D2562001	Strut
-----	----------	-------

8.0	D2565101	Strut
-----	----------	-------

9.0	D2565103	Strut
-----	----------	-------

10.0	D2565105	Strut
------	----------	-------

11.0	D2565107	Strut
------	----------	-------

12.0	D2565109	Strut
------	----------	-------

13.0	D2565111	Strut
------	----------	-------

14.0	AN45A	Bolt
------	-------	------

15.0	AN46A	Bolt
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Date: Sunday, 11/6/2005 2:02:32 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 205 STEP(STANDARD HEIGHT)

Job Number: 24254

Part Number: D205633011

Job Number:



Seq. #:	Machine Or Operation:	Description :
16.0	AN47A	Bolt
17.0	AN414A	Bolt
18.0	AN56A	Bolt
19.0	AN514A	Bolt
20.0	AN960JD416	Washer
21.0	AN960JD516	Washer
22.0	MS21042L4	Nut
23.0	MS21042L5	Nut
24.0	D2563	Step Weldment Assembly
25.0	QC4	INSPECT 100% KITS FOR COMPLETENESS
 		
Comment: INSPECT 100% KITS FOR COMPLETENESS		
26.0	PACKAGING 1	PACKAGING RESOURCE #1
 		
Comment: PACKAGING RESOURCE #1		
Identify and pack for shipping as per PPP D205-633-011		
Location: _____		
27.0	DC	DOCUMENT CONTROL
 		
Comment: DOCUMENT CONTROL		
Inspection Level 21		

Job Completion



Date: Sunday, 11/6/2005 2:02:39 PM  
 User: Linda Lacelle

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : STEP WELDMENT
<b>Job Number</b> : 24254A	
<b>Estimate Number</b> : 10176	
<b>P.O. Number</b> :	<b>Part Number</b> : D2563
<b>This Issue</b> : 11/6/2005 <b>S.O. No.</b> :	<b>Drawing Number</b> : D2563 REV B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> :
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 24253A	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 11/30/2005 <b>Qty:</b> 10 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> :	
<b>Comment</b> : Est Rev:G 02.07.31    Re-format Location RF	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D2244116	Step Extrusion
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2.0	D267334	End Plate
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3.0	D2561	Lug Plate
-----	-------	-----------

4.0	D2564	Mounting Angle
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5.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

1-Cut D2244 to 89.70" at 34° as per Dwg D2563

2-Deburr ends

3-Inspect for foreign object per QSI 024

4-Weld as per Dwg D2563 using DT 8343

5-Grind

6.0	QC5/9	WELD INSPECTION
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**Comment:** WELD INSPECTION

7.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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**Comment:** HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Date: Sunday, 11/6/2005 2:02:39 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

Job Number: 24254A

Part Number: D2563

Job Number:



Seq. #:	Machine Or Operation:	Description :
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8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D2563 and QSI 005 4.4

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Job Completion



5/46

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>24254</b>
<b>Description: 205 Step (Standard Height)</b>	<b>Part Number:</b>	<b>D205-633-011</b>
<b>Dwg:</b>	<b>Qty:</b>	<b>10</b>

Step	Location	Procedure	By	Date	Qty																																																																																				
1	DC	Issue Travellers for: D205-633-011 205 Step (Std. Height) D2563 Step Weldment Ass'y	Batch 24254 24254	05.09.14	10																																																																																				
2	DC	Photocopy blue file and create labels per PPP D205-633-011 CHG001	UK 44																																																																																						
3	PK	<b>Pick: Packing Kit</b> <table><thead><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr></thead><tbody><tr><td>1</td><td>D2021-101</td><td>Eyebolt B 2 3483</td><td><del>B24254</del></td></tr><tr><td>2</td><td>D2022-101</td><td>Spacer</td><td>15X B21505</td></tr><tr><td>2</td><td>D2022-103</td><td>Spacer</td><td>B24271</td></tr><tr><td>1</td><td>D2562-001</td><td>Strut</td><td>B24272</td></tr><tr><td>1</td><td>D2565-101</td><td>Strut</td><td>5 B23182 / 5 B24273</td></tr><tr><td>1</td><td>D2565-103</td><td>Strut</td><td>B24274</td></tr><tr><td>1</td><td>D2565-105</td><td>Strut</td><td>B24275</td></tr><tr><td>1</td><td>D2565-107</td><td>Strut</td><td>B24276</td></tr><tr><td>1</td><td>D2565-109</td><td>Strut</td><td>B24277</td></tr><tr><td>1</td><td>D2565-111</td><td>Strut</td><td>B24278</td></tr><tr><td>2</td><td>AN4-5A</td><td>Bolt</td><td>M18833</td></tr><tr><td>2</td><td>AN4-6A</td><td>Bolt</td><td>M16067</td></tr><tr><td>2</td><td>AN4-7A</td><td>Bolt</td><td>M18310</td></tr><tr><td>1</td><td>AN4-14A</td><td>Bolt</td><td>M15072</td></tr><tr><td>1</td><td>AN5-6A</td><td>Bolt</td><td>M13441</td></tr><tr><td>1</td><td>AN5-14A</td><td>Bolt</td><td>M11921</td></tr><tr><td>15</td><td>AN960JD416</td><td>Washer</td><td>M17566</td></tr><tr><td>4</td><td>AN960JD516</td><td>Washer</td><td>M17614</td></tr><tr><td>8</td><td>MS21042L4</td><td>Nut</td><td>M17492</td></tr><tr><td>2</td><td>MS21042L5</td><td>Nut</td><td>M17653</td></tr></tbody></table>	Qty	Part Number	Description	Batch	1	D2021-101	Eyebolt B 2 3483	<del>B24254</del>	2	D2022-101	Spacer	15X B21505	2	D2022-103	Spacer	B24271	1	D2562-001	Strut	B24272	1	D2565-101	Strut	5 B23182 / 5 B24273	1	D2565-103	Strut	B24274	1	D2565-105	Strut	B24275	1	D2565-107	Strut	B24276	1	D2565-109	Strut	B24277	1	D2565-111	Strut	B24278	2	AN4-5A	Bolt	M18833	2	AN4-6A	Bolt	M16067	2	AN4-7A	Bolt	M18310	1	AN4-14A	Bolt	M15072	1	AN5-6A	Bolt	M13441	1	AN5-14A	Bolt	M11921	15	AN960JD416	Washer	M17566	4	AN960JD516	Washer	M17614	8	MS21042L4	Nut	M17492	2	MS21042L5	Nut	M17653	DL	06/02/06	10
Qty	Part Number	Description	Batch																																																																																						
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2	AN4-6A	Bolt	M16067																																																																																						
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5	QC4	Inspect 100% Kit for Completeness	CL	06/02/06	10																																																																																				
6	PK	Identify and pack for shipping as per PPP D205-633-011	DEV 6	6/2/6	10																																																																																				
7	AC	Cost / part	Shr	06-02-08	16																																																																																				
8	DC	Close work Order and Ensure Travellers Attached Inspect Level 21 Travellers: D205-633-011 D2563		06/02/07	10																																																																																				

Rev	Date	Change	Revised By	Approved
A	97.03.05			
B	99.02.18	Re-format	DM	
C	00.03.27	Add reference to PPP	EC	
D	01.04.03	Added D3010 to pick list	EC	
E	01.04.09	Incorporated D2563 step	EC	
F	02.07.11	Reformat; Removed D3010 from Step 3	RF	

RELEASED  
02/08/02 RF



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Sep 13, 2005  
03:34 pm

Work Order No : 0024254  
Project Name : \*D205-633-011  
Project For : WK546  
Work Order Type : Main  
Main WO Number :  
House Part Number : \*D205-633-011  
Description : Heli-Access-Step  
Manufactured : Yes  
Amount Req'd : 10  
Amount Done : 0  
Start Date : 09-13-05  
Est Finish Date : 11-17-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Mark Up : 0.000%  
Actual Mark Up : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00